

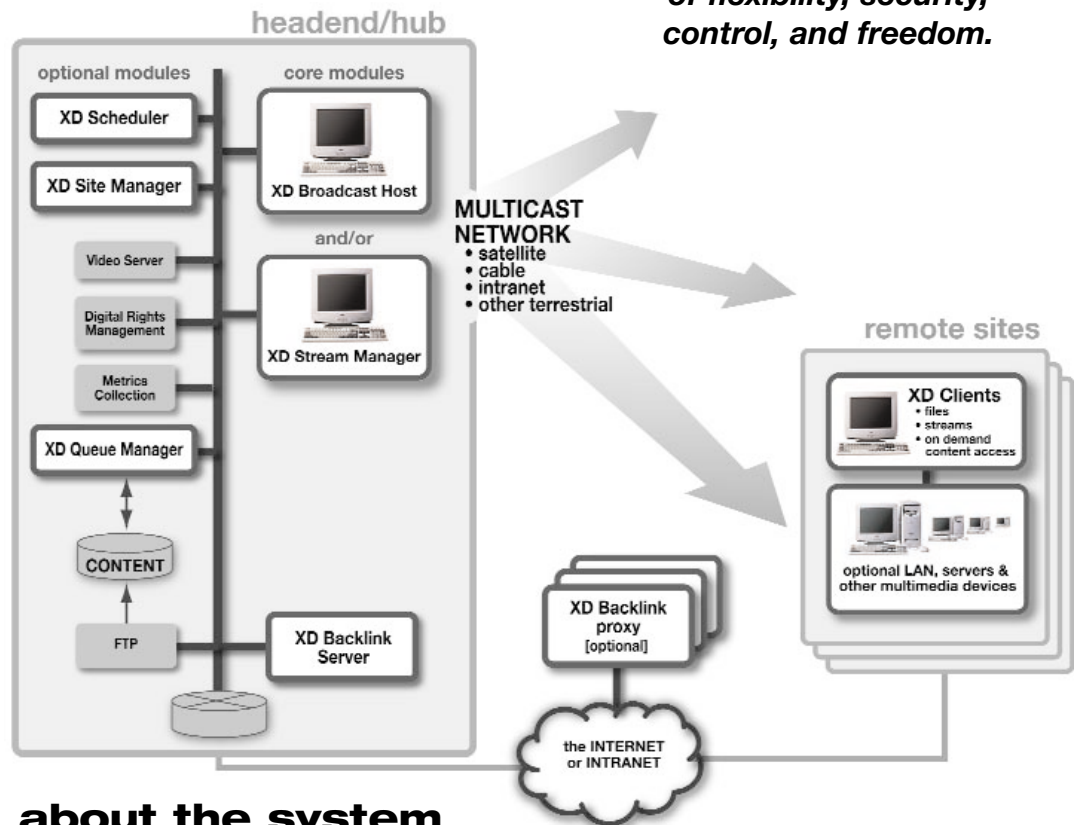
Datacast XD

content distribution made simple

Datacast XD is the state-of-the-art content distribution software system that lets you multicast broadband multimedia content with an unprecedented degree of flexibility, security, control, and freedom.

features:

- scalable, easy to grow
 - easy to use—quick to implement
 - full-featured SDK
 - supports remote operations
 - low-impact client
 - encryption and conditional access
 - secure addressable file transfer & stream management
 - variable file-based forward error correction
 - transport stream FEC
 - file reconstruction
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- Datacast XD is multi-platform: works with Windows, Linux, and Solaris operating systems**
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- Custom configure the system—buy only the modules you need!**



about the system

XD Broadcast Host is the core module for the entire system. Exploiting a robust protocol that is highly resilient to data disruption, the Broadcast Host offers unprecedented flexibility in implementation, ease of use, and support for multiple connectivity options. The Broadcast Host incorporates sophisticated conditional access schemes and offers file transport packaging featuring compression, encryption and variable forward error correction.

XD Backlink Server enables XD Clients to utilize an Internet/intranet-based return channel to confirm receipt and request retransmission of missing file packets. The Backlink Server is unique in its ability to return missing packets over the main multicast channel, or—alternatively—unicast directly over the return channel. Unicast return enables precise calculation of time required to broadcast a specific file.

XD Client works in tandem with the XD head-end modules to provide secure, reliable multicast delivery of both files and streams across any broadcast network. Extremely efficient coding on the Client means that use of CPU resources is minimal, leaving processing power for other applications. An Internet or intranet back channel can be used (where available) to request retransmission of missing file packets, and to confirm successful file delivery. The XD Enterprise Client upgrade provides a complete solution to on-demand distribution of content at remote sites.

XD Client comes pre-loaded on IDC's SFX2100 series of Satellite Multimedia Server Appliances and works with any IP satellite receiver as well as cable, intranet and other terrestrial technology.



Other modules add more functionality, pick and choose from the following powerful options:

XD Scheduler is a standalone module for time-based 7/24 scheduling, carousel, or ad hoc transmission of files by the Broadcast Host. Files can be grouped into a “container”, which is assigned specific broadcast attributes, descriptive meta-data and target recipients, and is submitted to one of the Broadcast Host’s three priority queues for transfer. The Scheduler provides a real-time status of Broadcast Host operation, logs all file transmissions, and produces reports on file delivery confirmations as well as problem sites.

XD Stream Manager acts as a “protective pipe”, the Stream Manager applies on-the-fly encryption and forward error correction to the secure, conditional delivery of real-time streams to the XD Client base. The Stream Manager can also act as a software multiplexer, carrying up to 15 component streams in a single multicast output channel. Conditional access to channel components is controlled individually, with XD Clients propagating only those streams for which they are authorized. Stream Manager also exploits this multiplexing capability to deliver the control files necessary to interpret and playback real-time audio and video streams.

XD Queue Manager maintains a highly flexible, XML standards based interface portal, in support of the integration of XD Host operations within existing systems or applications. External or remote processes may use FTP to deliver both content and XML directives to a “hot folder” monitored by Queue Manager. These directives—which specify target content, transmission options, and authorized recipients—are interpreted by Queue Manager and forwarded as commands to the Broadcast Host for execution.

XD Site Manager creates and maintains the XD Client administrative database. Primary functions include unique site ID specification, assignment of conditional access rights to both file and stream based content, and creation or update of site-specific license files delivered via the broadcast channel. Site Manager stores contact information for each individual site and provides for the creation of group addressing lists.

XD Backlink Proxy When operating in unicast mode, Backlink Server operation may optionally be augmented through the addition of one or more Backlink Proxy Servers. The Backlink Proxy provides packet replication to a subset of the XD Client base. Any requested missing packet is retrieved from the main Backlink Server only once, with subsequent requests for that packet being serviced directly by the Proxy. Backlink Proxies may be implemented hierarchically within a network, providing a highly scalable solution to an Internet or intranet return path.

XD Software Development Kit (SDK)

is available to give application developers or system integrators access to the resources required for a completely customized implementation of the XD Broadcast Host or XD Client. The SDK is comprised of the low level “C” code API used internally for XD system module inter-communication, as well as complete documentation and sample coding templates.

Datacast XD integrator edition

The XD Integrator Edition fast tracks the integration of XD file multicast capability to “broadcast enable” existing applications or systems in record time. Key to this ability is the Queue Manager, which uses XML based command directives—generated by external applications and delivered to a hot folder—to seamlessly drive all aspects of Broadcast Host file transfer operation. The Integrator Edition also includes the XD SDK, which provides low-level access to all system functionality for completely customized Broadcast Host or XD Client operation.

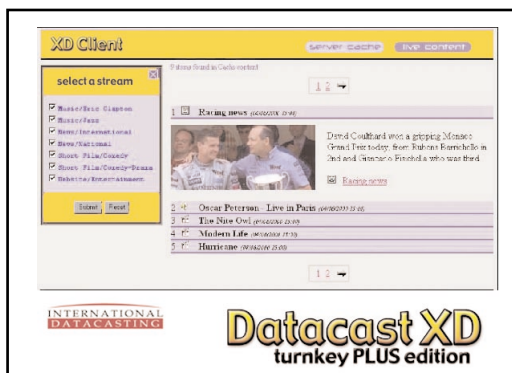
Datacast XD turnkey edition

The XD Turnkey Edition indeed offers a complete turnkey solution to implementation of a standalone system for multicast distribution of both files and streams. Inclusive of both the XD Broadcast Host and Stream Manager, the Turnkey Edition provides support for all aspects of broadcast data dissemination, including remote site management, conditional access assignment, file grouping and scheduling, and delivery confirmation reporting. The XD Turnkey Client supports file transfers and streams.

Datacast XD turnkey PLUS edition

The XD Turnkey PLUS Edition is a superset of XD Turnkey that supports implementation of XD Enterprise Clients, enabling on-demand distribution of delivered content at remote locations. Turnkey PLUS provides facilities at the head-end for creation and management of descriptive meta-data for both files and streams, which it delivers in tandem with associated content. The XD Enterprise Client’s integrated Web Server processes this meta-data dynamically to provide cataloging and direct content access to all other computers on the remote LAN, employing standard Web tools. XD Turnkey Plus Client supports file transfers, streams and content on demand distribution.

A sample screen from the XD Enterprise Client showing how content-on-demand can be accessed through a customizable GUI. Select XD standard packages, or configure the combination of modules and features required for your particular application.



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